J.P.Morgan

US Fixed Income Strategy

Short-Term Fixed Income Markets Research Note
J.P. Morgan Securities LLC
July 16, 2014

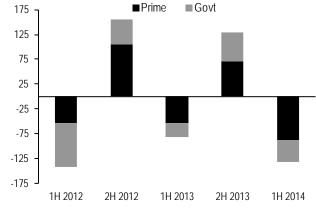
Prime money market fund holdings update

June 2014

- Typical quarter-end dynamics dominated MMF holdings this past month. But unlike prior instances, this quarter-end was particularly dramatic. Given upcoming leverage ratio disclosures, many banks significantly shrunk their balance sheets at the end of June, triggering a sharp spike in RRP usage among money funds. While this was only a temporary phenomenon (as banks returned to scaling their balance sheets post quarter-end), these acute spikes in RRP holdings are significant in that they highlight the ease to which funds can move en masse into the RRP facility. As bank regulations continue to be implemented, this pattern of increased RRP usage at quarter-ends could become a regular feature.
- Total taxable MMF AuMs declined by \$13bn (0.6%) in June, significantly less than the average June outflow over the prior 2 years of \$27bn. As is typically the case, flows out of prime MMFs prompted the contraction in balances (-\$15bn). Government MMFs on the other hand saw \$2bn of inflows. YTD, taxable MMF balances have declined by \$132bn or 5.4%. While fairly sizable, outflows during the first half of the year are rather common (Exhibit 1). Cash typically returns to the MMF complex in the second half. However, given the potential imminent release of a final rule on money fund reform, it's unclear we will see a similar dynamic unfold this year.
- As discussed in our last weekly publication, the Fed allotted \$295bn of Fed RRP to MMFs at the end of June, representing about 87% of the \$340bn total usage (Exhibit 2). There is a history of quarter-end surges in MMFs' use of the RRP program, but this past

Exhibit 1: MMF outflows during the first half of the year have been common

1H and 2H change in prime and govt MMF AuMs; \$bn



Source: iMoneyNet

Short Duration Strategy

Alex Roever AC (212) 834-3316 alex.roever@jpmorgan.com

Teresa Ho (212) 834-5087 teresa.c.ho@jpmorgan.com

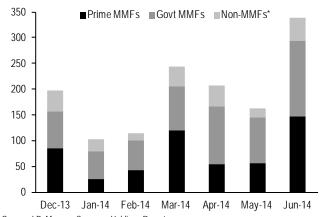
John Iborg (212) 834-2011 john.r.iborg@jpmorgan.com

J.P.Morgan

Alex Roever (212) 834-3316 Teresa Ho (212) 834-5087 John Iborg (212) 834-2011

Exhibit 2: MMFs are the key drivers behind usage of the RRP facility, especially at quarter-ends

Breakdown of RRP participation by counterparty type (\$bn)



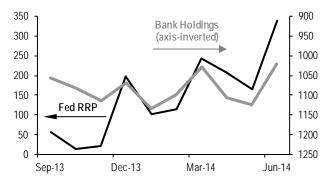
Source: J.P. Morgan, Company Holdings Reports * Non-MMFs include GSEs, banks and primary dealers

quarter-end is by far the largest. Both prime and government MMFs saw record participation into the RRP facility, totaling \$147bn and \$148bn respectively. There were four prime MMFs and zero government MMFs that went in for the full \$10bn allotment. Comparatively, there were three prime MMFs and two government MMFs that went in for the full \$7bn allotment at March quarter-end.

• The surge in RRP was prompted by a sharp pullback in bank balance sheets at quarter-end. As Exhibit 3 shows, there is a strong correlation between the amount of bank paper that MMFs hold and the amount that MMFs subscribe to the Fed RRP facility. This shouldn't come as

Exhibit 3: There's a strong correlation between the amount of bank paper and the amount of RRP that MMFs hold

Prime MMF holdings of bank exposures vs. total Fed RRP usage (\$bn)



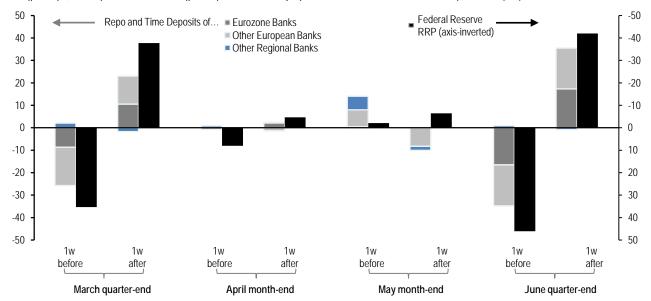
Source: J.P. Morgan, iMoneyNet, Company Holdings Reports
Note: Bank unsecured paper includes CP, CDs, TDs and other money market instruments.
Bank secured paper includes ABCP, CCP and repo.

a surprise as the demand for overnight assets increases in response to banks' desire to limit balance sheet size around quarter-ends. But the degree to which they were doing so intensified this past quarter following the release of the leverage ratio rule earlier this year. Under the rule, banks are required to formally disclose their leverage ratios beginning 1Q15 and include three quarters of historical data. In other words, 2Q14 leverage ratios will have to be disclosed beginning next year.

Due to the way leverage ratios are calculated by European bank regulators, European banks exhibited the greatest contraction in bank balance sheets. Unlike most US banks which measure their balance sheet costs against daily averages, many foreign banks manage

Exhibit 4: During quarter-ends, banks shrink their balance sheets, prompting MMFs to tap into the RRP facility to find an overnight cash substitute. Once quarter-end passes, this dynamic reverses course

MMF holdings of repo, time deposits and RRP among a sample of MMF weekly reporters, 1w before and after month-end/quarter-end (\$bn)



Source: J.P. Morgan, Weekly MMF holdings reports sampled from 4 fund families with 17 funds totaling ~\$300bn of assets under management (represent roughly 15% of eligible RRP counterparty AuMs and 13% of taxable MMF AuMs)

Short Duration Strategy July 16, 2014 J.P.Morgan

Alex Roever (212) 834-3316 Teresa Ho (212) 834-5087 John Iborg (212) 834-2011

their costs against a quarterly average calculated using month-end balances. As a result, European banks have shown the greatest fluctuation in their overnight funding liabilities pre- and post-quarter-end, which has then impacted MMFs' usage of the RRP facility. A sample collection of weekly MMF holdings of repo and time deposits pre- and post-quarter-ends shows this very dynamic among European banks with MMFs (Exhibit 4).

- It's no surprise then that June sector allocations data show that prime MMFs significantly reduced their exposures to Yankee banks, only to be offset by their increase to the Fed's RRP facility (Exhibit 5). The decline in Yankee bank holdings was primarily concentrated in time deposits. By jurisdiction, the decrease was driven by reductions in holdings of French banks (-\$18bn), Swedish banks (-\$17bn), Norwegian banks (-\$14bn), and UK banks (-\$13bn) (Exhibit 6).
- Notably, prime MMFs' holdings of Japanese banks were the only banking sector that materially increased month-over-month. As of June month-end, Japanese bank exposures increased by \$12bn, mostly via growth in unsecured CDs. In total, prime MMFs have \$169bn of exposures to Japanese banks, slightly below the peak of \$174bn in November 2013. At current levels, they are the second largest banking sector holding in prime MMFs, representing about 17% of total bank exposures.

Exhibit 5: Prime MMFs offset their reductions in Yankee bank exposures with an increase in Fed RRP usage Prime MMF exposures by sector (\$bn)

				chg		% chg
		% of	m/m	since	m/m %	since
Issuer Type	Jun-14	total	chg	Dec-13	chg	Dec-13
Banks (US)	168	12%	4	(7)	2%	-4%
Banks (Eurozone)	191	13%	(56)	(14)	-23%	-7%
Banks (Other Yankee)	593	42%	(55)	(24)	-8%	-4%
ABCP/CCP (Banks)	69	5%	3	(5)	4%	-6%
ABCP (Non-banks)	17	1%	(0)	(3)	-2%	-17%
ABS issuers	1	0%	0	(0)	24%	-23%
Corporates (Financial)	13	1%	(1)	(4)	-8%	-25%
Corporates (Non-financial)	33	2%	0	2	1%	8%
US Treasuries	64	5%	2	(38)	3%	-37%
US Agencies	79	6%	5	(35)	7%	-30%
US S&L Govt/Munis	19	1%	(2)	(9)	-8%	-33%
Foreign SSA	42	3%	2	4	5%	10%
Central Banks (Fed RRP)	145	10%	89	74	158%	103%
Other	6	0%	2	1	61%	30%
Total	1,441	100%	(6)	(57)	0%	-4%

*Includes bank sponsored, non-bank sponsored, and government/agency sponsored conduits. Source: J.P. Morgan estimates, fund holdings reports, iMoneyNet

Note: J.P. Morgan estimates of exposures in prime money market funds are based on a sample of large funds including funds managed by Fidelity, BlackRock, JPMorgan, Vanguard, Federated, Dreyfus, Wells Fargo, Goldman Sachs, Morgan Stanley, UBS, Schwab, SSgA, American Funds, BofA, First American, Northern, Prudential, RBC, Western Asset Management. Sample represents 86% of US prime money market fund market in terms of assets under management. Allocation percentages are calculated from the sample and then applied to the period's total prime fund assets under management. Banks include unsecured CP, ABCP, CD, time deposits, repo, and other notes. Corporates include CP and other notes. US Treasuries include T-bills and coupons. US Agencies include discount notes and fixed/floating notes. US S&L Govt/Muni include muni CP, notes, and VRDNs. Foreign SSA includes CP, CDs, ad other notes. Central banks include repo. Other includes investments in funds including other MMFs and tax-exempt preferreds.

Exhibit 6: Prime MMF total bank holdings decreased by \$104bn in June, driven by declines in time deposits and CP/CD outstandings

J.P. Morgan estimate of prime MMF exposures to banks (\$bn)

		Jun-14					m/m change								Change since Dec-13																
	Issuer # / Top 3	CP	CD	10	ABCP	CCP	Agy RP	Tsy RP	Oth RP	Other	Total	СР	CD	TD	ABCP	CCP	Agy RP	Tsy RP	Oth RP	Other	Total	CP	CD	TD	ABCP	CCP	Agy RP	Tsy RP	Oth RP	Other	Total
Total	76 / 14%	159	549	53	54	15	45	8	89	48	1,020	(18)	(11)	(71)	4	(1)	(9)	(8)	3	6	(104)	(0)	6	(35)	(5)	0	(29)	(8)	8 1	4 (49)
Eurozone	16 / 49%	23	106	21	21	2	15	5	16	4	214	(3)	(20)	(23)	3	(1)	(9)	(2)	1	1	(54)	(3)	14	(22)	2	(1)	(5)	1	(0)	2 (12)
Austria	1 / 100%	-	-	1	-	-	-	-	- '	-	1	-	-	(0)	-	- [-	-	- '	-	(0)	-	-	(0)	-	- 1	-	-	- 1	-	(0)
Belgium	1 / 100%	-	-	1	-	- '	-	-	-	-	1	-	(7)	(3)	-	- 1	-	-	- 1	-	(9)	-	-	1	-	- '	-	-	- [-	1
France	5 / 80%	10	64	15	12	1	11	4	12	1	130	(2)	(11)	(18)	2	(0)	(6)	0	1	1	(33)	(7)	23	(22)	0	0	(1)	1	(0)	1	(3)
Germany	4 / 94%	3	13	1	6	1	2	0	2	1	30	0	(1)	(1)	1	(1)	(3)	(3)	(1)	0	(9)	2	(7)	0	2	(1)	(3)	(0)	1	0	(6)
Luxembourg	1 / 100%	0	-	-	-	-	-	-	- '	-	0	0	-	-	-	- [-	-	- '	-	0	0	-	-	-	- [-	-	- '	-	0
Netherlands	4 / 100%	10	29	4	2	-	2	1	2	2	51	(1)	(1)	(1)	0	- '	(0)	0	0	(0)	(2)	2	(2)	(2)	(0)	- '	(2)	(0)	(1)	1	(5)
Other Europe	13 / 49%	49	75	17	9	1	2	1	21	8	183	(15)	(7)	(44)	0	0	(3)	(5)	0	1	(73)	(3)	(8)	(4)	0	(0)	(4)	(1)	4	1 (14)
Norway	1 / 100%	7	3	-	-	-	-	-	- 1	-	11	(0)	(2)	(14)	-	- '	-	-	•	(0)	(17)	0	(3)	(0)	-	٠.'	-	-	- [-	(4)
Sweden	4 / 82%	28	32	15	-	-	-	-	- '	7	82	(0)	(4)	(17)	-	-	-	-	- '	1	(20)	(2)	5	(3)	-	- [-	-	- '	1	1
Switzerland	2 / 100%	3	25	-	4	- '	1	1	18	1	53	(0)	(0)	-	(1)	- '	1	1	0	0	0	(0)	(7)	-	3	- '	(1)	1	4	0	1
UK	6 / 78%	10	15	1	5	1	0	1	3 '	1	38	(15)	(1)	(13)	1	0	(3)	(5)	0 "	0	(36)	(1)	(3)	0	(3)	(0)	(3)	(2)	0 ' ((0)	12)
Other Regions	47 / 23%	87	367	15	24	11	29	3	51	36	623	1	17	(4)	0	(0)	3	(1)	2	4	22	6	0	(9)	(7)	1 1	(21)	(8)	5 1	0 (23)
Australia	6 / 81%	51	25	4	0	-	-	-	- '	6	86	0	2	(3)	(0)	- [-	-	- '	1	1	3	(7)	(5)	(0)	- [-	-	- '	1	(8)
Canada	7 / 70%	5	121	6	8	4	4	1	5	6	160	(0)	(2)	3	1	0 '	1	1	1	0	4	(1)	(6)	2	(1)	1 '	1	(1)	1	4	0
Chile	4 / 91%	1	1	-	-	-	-	-	- '	-	2	0	(0)	-	-	-	-	-	- '	-	0	0	0	-	-	- [-	-	- '	-	0
China	3 / 100%	0	3	1	-	- '	-	-	-	1	4	0	0	(0)	-	- '	-	-	- [0	0	0	(2)	0	-	- '	-	-	-	1	(2)
India	1 / 100%	0	-	-	-	-	-	-	- '	-	0	(0)	-	-	-	-	-	-	- '	-	(0)	(0)	-	-	-	-	-	-	- '	-	(0)
Japan	7 / 74%	8	141	3	7	- '	3	0	4	2	169	(0)	11	(1)	1	- '	1	0	(0)	1	12	1	(2)	(3)	0	- '	(3)	0	(0)	1	(5)
Kuwait	1 / 100%	-	1	-	-	-	-	-	- '	-	1	-	0	(1)	-	-	-	-	- '	-	(1)	-	0	(0)	-	-	-	-	- '	-	(0)
Singapore	3 / 100%	9	5	0	-	- '	-	-	-	2	16	1	1	0	-	- '	-	-	- [0	2	3	0	(1)	-	- '	-	(2)	-	2	2
US	15 / 67%	12	69	3	9	8	21	1	42	20	186	(1)	4	(2)	(1)	(0)	2	(2)	1	1	2	(1)	17	(3)	(6)	0	(19)	(5)	3	2 (11)

Source: J.P. Morgan estimates, fund holdings reports, iMoneyNet. *Top 3 issuer concentrations by country. Note: Other category includes money market eligible notes/bonds. Table does not include exposures to VRDN credit/liquidity providers.

Short Duration Strategy July 16, 2014 J.P.Morgan

Alex Roever (212) 834-3316 Teresa Ho (212) 834-5087 John Iborg (212) 834-2011

- Despite negative headlines of BNP Paribas in late May, prime MMFs did not materially reduce their exposures to the counterparty last month. In fact, as of June month-end exposures to BNP Paribas amounted to \$37.7bn, down only \$1.8bn from the prior month, with most of the exposures continuing to be concentrated in unsecured CP/CDs (Exhibit 7). However, the weighted average maturity of CP/CD holdings of BNP Paribas fell fairly sizably, to 40 days as of June month-end from 52 days at the end of May and 86 days at the end of April. Clearly, accounts have shortened their maturities in an attempt to reduce their exposure to the counterparty. Still, BNP Paribas continues to have a broad investor base with 20 prime money fund families invested in the name as of June month-end.
- At the end of June, MMFs held a total of \$15.9bn in Treasury floaters, an increase of \$2.46bn from May. The pace at which MMFs have added Treasury FRNs has slowed somewhat in the second quarter (\$6.44bn) versus first quarter (\$9.46bn). At current levels, MMFs hold about 19% of the \$82bn currently outstanding, a decrease from 23% in March. This seems to suggest that non-MMF investors are participating in a greater portion of the market and finding this product relatively more attractive (Exhibit 8). Treasury MMFs continue to be the largest holders of Treasury FRNs with \$10.5bn in their portfolios as of May month end, followed by prime MMFs with \$4.1bn, and Government Agency MMFs with \$1.3bn.
- Looking ahead, forthcoming details about money fund reform and the Fed's exit strategy will dominate investors' focus the second half of this year. Those two events loom large given their potential to significantly reshape the money markets. We have discussed money fund reform and its implications on the money markets extensively in prior publications. According to various news articles, the SEC is expected to vote on a final rule next Wednesday on July 23. This has not been publicly confirmed by the SEC yet, but this is something we are monitoring very closely. On the Fed's exit strategy, we suspect more clarity would be provided soon perhaps at the September FOMC meeting.

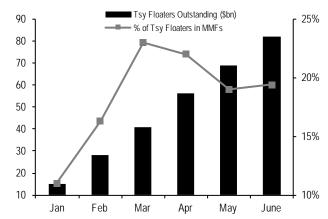
Exhibit 7: Despite negative headlines, holdings of BNP Paribas were nearly unchanged month-over-month Prime MMF exposures to BNP Paribas (\$bn)

Asset	May 2014	June 2014	Chg
CP	6.3	6.9	0.6
CD	16.1	14.7	(1.5)
TD	0.3	0.8	0.5
ABCP	1.4	1.4	0.0
CCP	1.4	1.2	(0.3)
Agy RP	8.1	6.5	(1.6)
Tsy RP	0.1	0.2	0.0
Oth RP	5.7	6.0	0.3
Other	0.0	0.1	0.1
Total	39.5	37.7	(1.8)

Source: J.P. Morgan estimates, fund holdings reports, iMoneyNet

Exhibit 8: MMFs currently hold about 19% of the Treasury floater market, a percentage that has been declining since March

Treasury Floater Outstanding versus % of Treasury Floaters in MMFs



Source: J.P. Morgan, Fund Holdings Reports, Crane Data

J.P. Morgan Securiites LLC

Alex Roever (212) 834-3316 Teresa Ho (212) 834-5087 John Iborg (212) 834-2011

Short Duration Strategy July 16, 2014



Disclosures

Analyst Certification: The research analyst(s) denoted by an "AC" on the cover of this report certifies (or, where multiple research analysts are primarily responsible for this report, the research analyst denoted by an "AC" on the cover or within the document individually certifies, with respect to each security or issuer that the research analyst covers in this research) that: (1) all of the views expressed in this report accurately reflect his or her personal views about any and all of the subject securities or issuers; and (2) no part of any of the research analyst's compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed by the research analyst(s) in this report. For all Korea-based research analysts listed on the front cover, they also certify, as per KOFIA requirements, that their analysis was made in good faith and that the views reflect their own opinion, without undue influence or intervention.

Company-Specific Disclosures: Important disclosures, including price charts, are available for compendium reports and all J.P. Morgan–covered companies by visiting https://jpmm.com/research/disclosures, calling 1-800-477-0406, or e-mailing research.disclosure.inquiries@jpmorgan.com with your request. J.P. Morgan's Strategy, Technical, and Quantitative Research teams may screen companies not covered by J.P. Morgan. For important disclosures for these companies, please call 1-800-477-0406 or e-mail research.disclosure.inquiries@jpmorgan.com.

Analysts' Compensation: The research analysts responsible for the preparation of this report receive compensation based upon various factors, including the quality and accuracy of research, client feedback, competitive factors, and overall firm revenues.

Other Disclosure

J.P. Morgan ("JPM") is the global brand name for J.P. Morgan Securities LLC ("JPMS") and its affiliates worldwide. J.P. Morgan Cazenove is a marketing name for the U.K. investment banking businesses and EMEA cash equities and equity research businesses of JPMorgan Chase & Co. and its subsidiaries.

Options related research: If the information contained herein regards options related research, such information is available only to persons who have received the proper option risk disclosure documents. For a copy of the Option Clearing Corporation's Characteristics and Risks of Standardized Options, please contact your J.P. Morgan Representative or visit the OCC's website at http://www.optionsclearing.com/publications/risks/riskstoc.pdf

Legal Entities Disclosures

U.S.: JPMS is a member of NYSE, FINRA, SIPC and the NFA. JPMorgan Chase Bank, N.A. is a member of FDIC. U.K.: JPMorgan Chase N.A., London Branch, is authorised by the Prudential Regulation Authority and is subject to regulation by the Financial Conduct Authority and to limited regulation by the Prudential Regulation Authority. Details about the extent of our regulation by the Prudential Regulation Authority are available from J.P. Morgan on request. J.P. Morgan Securities plc (JPMS plc) is a member of the London Stock Exchange and is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. Registered in England & Wales No. 2711006. Registered Office 25 Bank Street, London, E14 5JP. South Africa: J.P. Morgan Equities South Africa Proprietary Limited is a member of the Johannesburg Securities Exchange and is regulated by the Financial Services Board. Hong Kong: J.P. Morgan Securities (Asia Pacific) Limited (CE number AAJ321) is regulated by the Hong Kong Monetary Authority and the Securities and Futures Commission in Hong Kong and/or J.P. Morgan Broking (Hong Kong) Limited (CE number AAB027) is regulated by the Securities and Futures Commission in Hong Kong. Korea: J.P. Morgan Securities (Far East) Ltd, Seoul Branch, is regulated by the Korea Financial Supervisory Service. Australia: J.P. Morgan Australia Limited (JPMAL) (ABN 52 002 888 011/AFS Licence No. 238188) is regulated by ASIC and J.P. Morgan Securities Australia Limited (JPMSAL) (ABN 61 003 245 234/AFS Licence No. 238066) is regulated by ASIC and is a Market, Clearing and Settlement Participant of ASX Limited and CHI-X. Taiwan: J.P.Morgan Securities (Taiwan) Limited is a participant of the Taiwan Stock Exchange (company-type) and regulated by the Taiwan Securities and Futures Bureau. **India:** J.P. Morgan India Private Limited (Corporate Identity Number - U67120MH1992FTC068724), having its registered office at J.P. Morgan Tower, Off. C.S.T. Road, Kalina, Santacruz - East, Mumbai – 400098, is a member of the National Stock Exchange of India Limited (SEBI Registration Number INB 230675231/INF 230675231/INE 230675231) and Bombay Stock Exchange Limited (SEBI Registration Number - INB 010675237/INF 010675237) and is regulated by Securities and Exchange Board of India. Telephone: 91-22-6157 3000, Facsimile: 91-22-6157 3990 and Website: www.jpmipl.com. For non local research reports, this material is not distributed in India by J.P. Morgan India Private Limited. Thailand: This material is issued and distributed in Thailand by JPMorgan Securities (Thailand) Ltd., which is a member of the Stock Exchange of Thailand and is regulated by the Ministry of Finance and the Securities and Exchange Commission and its registered address is 3rd Floor, 20 North Sathorn Road, Silom, Bangrak, Bangkok 10500. Indonesia: PT J.P. Morgan Securities Indonesia is a member of the Indonesia Stock Exchange and is regulated by the OJK a.k.a. BAPEPAM LK. Philippines: J.P. Morgan Securities Philippines Inc. is a Trading Participant of the Philippine Stock Exchange and a member of the Securities Clearing Corporation of the Philippines and the Securities Investor Protection Fund. It is regulated by the Securities and Exchange Commission. Brazil: Banco J.P. Morgan S.A. is regulated by the Comissao de Valores Mobiliarios (CVM) and by the Central Bank of Brazil. Mexico: J.P. Morgan Casa de Bolsa, S.A. de C.V., J.P. Morgan Grupo Financiero is a member of the Mexican Stock Exchange and authorized to act as a broker dealer by the National Banking and Securities Exchange Commission. Singapore: This material is issued and distributed in Singapore by or through J.P. Morgan Securities Singapore Private Limited (JPMSS) [MCI (P) 199/03/2014 and Co. Reg. No.: 199405335R] which is a member of the Singapore Exchange Securities Trading Limited and is regulated by the Monetary Authority of Singapore (MAS) and/or JPMorgan Chase Bank, N.A., Singapore branch (JPMCB Singapore) which is regulated by the MAS. This material is provided in Singapore only to accredited investors, expert investors and institutional investors, as defined in Section 4A of the Securities and Futures Act, Cap. 289. Recipients of this document are to contact JPMSS or JPMCB Singapore in respect of any matters arising from, or in connection with, the document. Japan: JPMorgan Securities Japan Co., Ltd. is regulated by the Financial Services Agency in Japan. Malaysia: This material is issued and distributed in Malaysia by JPMorgan Securities (Malaysia) Sdn Bhd (18146-X) which is a Participating Organization of Bursa Malaysia Berhad and a holder of Capital Markets Services License issued by the Securities Commission in Malaysia. Pakistan: J. P. Morgan Pakistan Broking (Pvt.) Ltd is a member of the Karachi Stock Exchange and regulated by the Securities and Exchange Commission of Pakistan Saudi Arabia: J.P. Morgan Saudi Arabia Ltd. is authorized by the Capital Market Authority of the Kingdom of Saudi Arabia (CMA) to carry out dealing as an agent, arranging, advising and custody, with respect to securities business under licence number 35-07079 and its registered address is at 8th Floor, Al-Faisaliyah Tower, King Fahad Road, P.O. Box 51907, Riyadh 11553, Kingdom of Saudi Arabia.

Dubai: JPMorgan Chase Bank, N.A., Dubai Branch is regulated by the Dubai Financial Services Authority (DFSA) and its registered address is Dubai International Financial Centre - Building 3, Level 7, PO Box 506551, Dubai, UAE

Country and Region Specific Disclosures

U.K. and European Economic Area (EEA): Unless specified to the contrary, issued and approved for distribution in the U.K. and the EEA by JPMS plc. Investment research issued by JPMS plc has been prepared in accordance with JPMS plc's policies for managing conflicts of interest arising as a result of publication and distribution of investment research. Many European regulators require a firm to establish, implement and maintain such a policy. This report has been issued in the U.K. only to persons of a kind described in Article 19 (5), 38, 47 and 49 of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (all such persons being referred to as "relevant persons"). This document must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this document relates is only available to relevant persons and will be engaged in only with relevant persons. In other EEA countries, the report has been issued to persons regarded as professional investors (or equivalent) in their home jurisdiction. Australia: This material is issued and distributed by JPMSAL in Australia to "wholesale clients" only. This material does not take into account the specific investment objectives, financial situation or particular needs of the recipient. The recipient of this material must not distribute it to any third party or outside Australia without the prior written consent of JPMSAL. For the purposes of this paragraph the term "wholesale client" has the meaning given in section 761G of the Corporations Act 2001. Germany: This material is distributed in Germany by J.P. Morgan Securities plc, Frankfurt Branch and J.P.Morgan Chase Bank, N.A., Frankfurt Branch which are regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht. Hong Kong: The 1% ownership disclosure as of the previous month end satisfies the requirements under Paragraph 16.5(a) of the Hong Kong Code of Conduct for Persons Licensed by or Registered with the Securities and Futures Commission. (For research published within the first ten days of the month, the disclosure may be based on the month end data from two months prior.) J.P. Morgan Broking (Hong Kong) Limited is the liquidity provider/market maker for derivative warrants, callable bull bear contracts and stock options listed on the Stock Exchange of Hong Kong Limited. An updated list can be found on HKEx website: http://www.hkex.com.hk. Japan: There is a risk that a loss may occur due to a change in the price of the shares in the case of share trading, and that a loss may occur due to the exchange rate in the case of foreign share trading. In the case of share trading, JPMorgan Securities Japan Co., Ltd., will be receiving a brokerage fee and consumption tax (shouhizei) calculated by multiplying the executed price by the commission rate which was individually agreed between JPMorgan Securities Japan Co., Ltd., and the customer in advance. Financial Instruments Firms: JPMorgan Securities Japan Co., Ltd., Kanto Local Finance Bureau (kinsho) No. 82 Participating Association / Japan Securities Dealers Association, The Financial Futures Association of Japan, Type II Financial Instruments Firms Association and Japan Investment Advisers Association. Korea: This report may have been edited or contributed to from time to time by affiliates of J.P. Morgan Securities (Far East) Ltd, Seoul Branch. Singapore: JPMSS and/or its affiliates may have a holding in any of the securities discussed in this report; for securities where the holding is 1% or greater, the specific holding is disclosed in the Important Disclosures section above. India: For private circulation only, not for sale. Pakistan: For private circulation only, not for sale. New Zealand: This material is issued and distributed by JPMSAL in New Zealand only to persons whose principal business is the investment of money or who, in the course of and for the purposes of their business, habitually invest money. JPMSAL does not issue or distribute this material to members of "the public" as determined in accordance with section 3 of the Securities Act 1978. The recipient of this material must not distribute it to any third party or outside New Zealand without the prior written consent of JPMSAL. Canada: The information contained herein is not, and under no circumstances is to be construed as, a prospectus, an advertisement, a public offering, an offer to sell securities described herein, or solicitation of an offer to buy securities described herein, in Canada or any province or territory thereof. Any offer or sale of the securities described herein in Canada will be made only under an exemption from the requirements to file a prospectus with the relevant Canadian securities regulators and only by a dealer properly registered under applicable securities laws or, alternatively pursuant to an exemption from the dealer registration requirement in the relevant province or territory of Canada in which such offer or sale is made. The information contained herein is under no circumstances to be construed as investment advice in any province or territory of Canada and is not tailored to the needs of the recipient. To the extent that the information contained herein references securities of an issuer incorporated, formed or created under the laws of Canada or a province or territory of Canada, any trades in such securities must be conducted through a dealer registered in Canada. No securities commission or similar regulatory authority in Canada has reviewed or in any way passed judgment upon these materials, the information contained herein or the merits of the securities described herein, and any representation to the contrary is an offence. Dubai: This report has been issued to persons regarded as professional clients as defined under the DFSA rules. Brazil: Ombudsman J.P. Morgan: 0800-7700847 / ouvidoria.jp.morgan@jpmorgan.com

General: Additional information is available upon request. Information has been obtained from sources believed to be reliable but JPMorgan Chase & Co. or its affiliates and/or subsidiaries (collectively J.P. Morgan) do not warrant its completeness or accuracy except with respect to any disclosures relative to JPMS and/or its affiliates and the analyst's involvement with the issuer that is the subject of the

J.P. Morgan Securiites LLC

Alex Roever (212) 834-3316 Teresa Ho (212) 834-5087 John Iborg (212) 834-2011 **Short Duration Strategy** July 16, 2014



research. All pricing is as of the close of market for the securities discussed, unless otherwise stated. Opinions and estimates constitute our judgment as of the date of this material and are subject to change without notice. Past performance is not indicative of future results. This material is not intended as an offer or solicitation for the purchase or sale of any financial instrument. The opinions and recommendations herein do not take into account individual client circumstances, objectives, or needs and are not intended as recommendations of particular securities, financial instruments or strategies to particular clients. The recipient of this report must make its own independent decisions regarding any securities or financial instruments mentioned herein. JPMS distributes in the U.S. research published by non-U.S. affiliates and accepts responsibility for its contents. Periodic updates may be provided on companies/industries based on company specific developments or announcements, market conditions or any other publicly available information. Clients should contact analysts and execute transactions through a J.P. Morgan subsidiary or affiliate in their home jurisdiction unless governing law permits otherwise.

"Other Disclosures" last revised June 21, 2014.

Copyright 2014 JPMorgan Chase & Co. All rights reserved. This report or any portion hereof may not be reprinted, sold or redistributed without the written consent of J.P. Morgan.